

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P57781V	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 00/ 02683	International filing date (day/month/year) 11/07/2000	(Earliest) Priority Date (day/month/year) 17/07/1999
Applicant KERR, Jonathan Quinton		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

STERILE OPHTHALMIC BARRIER DEVICE

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

6

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT 00/02683

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61B1/00 A61B3/125 A61B3/10 A61B3/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NARDI M, BARTOLOMEI M.P., FALCO L., CARELLI F.: "Disposable film cover for the tip of Goldmann's Tonometer" GRAEFE'S ARCHIVE FOR CLINICAL AND EXPERIMENTAL OPHTHALMOLOGY, vol. 223, 1985, pages 109-110, XP000943189	1-4, 7, 8, 14-18
A	Whole Document	12, 13
X	US 5 002 057 A (BRADY STEVEN E) 26 March 1991 (1991-03-26) cited in the application	1-9, 14-18
Y	column 3, line 7-47; figures 1-3 column 4, line 8 -column 5, line 13 column 5, line 35 -column 6, line 9	9-13
	--- -/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

13 November 2000

Date of mailing of the international search report

24/11/2000

Name and mailing address of the ISA

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Authorized officer

Casse, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT 00/02683

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 922 914 A (SEGAL ELIZABETH O ET AL) 8 May 1990 (1990-05-08) cited in the application	1,5-13
Y	column 5, line 6-27; figures 5,6 ---	9-13
A	US 5 113 863 A (HERMAN WESLEY K) 19 May 1992 (1992-05-19) column 5, line 23-62; figure 5 column 6, line 6 -column 7, line 39; figures 5-9 ---	1,9-11
A	FR 2 683 990 A (LEHTIMET YOUNES) 28 May 1993 (1993-05-28) page 1, line 36 -page 2, line 15 page 3, line 30 -page 4, line 6; figures 6,10,12 -----	1,9-11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC 00/02683

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5002057	A	26-03-1991	NONE	
US 4922914	A	08-05-1990	NONE	
US 5113863	A	19-05-1992	US 5343861 A	06-09-1994
FR 2683990	A	28-05-1993	NONE	

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

TOWNSEND, Victoria J.
FRY HEATH & SPENCE
The Old College
53 High Street
Horley, Surrey RH6 7BN
GRANDE BRETAGNE

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)



Date of mailing
(day/month/year)

12.09.2001

Applicant's or agent's file reference
P57781V

IMPORTANT NOTIFICATION

International application No.
PCT/GB00/02683

International filing date (day/month/year)
11/07/2000

Priority date (day/month/year)
17/07/1999

Applicant
KERR, Jonathan Quinton

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P57781V	FOR FURTHER ACTION		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/GB00/02683	International filing date (<i>day/month/year</i>) 11/07/2000	Priority date (<i>day/month/year</i>) 17/07/1999	
International Patent Classification (IPC) or national classification and IPC A61B1/00			
Applicant KERR, Jonathan Quinton			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 12/01/2001	Date of completion of this report 12.09.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Casse, M Telephone No. +49 89 2399 2769 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02683

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):
- Description, pages:**

1-10 as originally filed

Claims, No.:

1-10 as received on 16/08/2001 with letter of 13/08/2001

Drawings, sheets:

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02683

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-10
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-8,10
	No:	Claims	9
Industrial applicability (IA)	Yes:	Claims	1-10
	No:	Claims	

2. Citations and explanations see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/02683

Re Item V

- 1.) Reference is made to the following documents:

D1 = "Disposable film cover for the tip of Goldmann's tonometer", Nardi M. et al, Graefe's Archive for clinical and experimental Ophthalmology, 1995, vol. 223, pages 109-110.

D2 = US5002057

D3 = US4922914

D4 = US5113863

D5 = FR2683990

- 2.) Document D2 is considered as the closest prior art to the subject matter of claim 1 and discloses a packaged barrier for a tonometer from which the subject-matter of claim 1 differs in that a peelable adhesive is deposited on a surface of the barrier layer and that a plurality of barriers is provided on the backing sheets.

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT).

The problem to be solved by the present invention may therefore be regarded as providing multiple barrier on a single carrier sheets and providing means to affix the barrier to the probe.

Providing multiple barriers in a single pack is a well-known feature in the art in the art, see D4 (col. 5, line 30-32) or D5 (figure 12) for example. It would be therefore straightforward to provide a multiple barrier pack for the barrier of D2.

However, regarding the adhesive layer on the alternative barrier surface, D2 relies instead on a carrier having an aperture which allows to stretch the film over the sides of the probe without a peelable adhesive layer on at least on part of the film.

The subject matter of claim 1 provides therefore a plurality of disposable sterile covers which can be individually applied on the probe without any additional frameworks

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/02683

Claim 1 appears therefore to involve an inventive step.

The other documents provide more complex frameworks (D1) to hold disposable films or on disposable rigid caps (D3, D4, D5) for the probes.

- 3.) Claims 2 to 8 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 4.) The subject matter of claim 9 differs from the sterile cover of D2 in that a plurality of barriers is provided on the backing sheet. As discussed above, this is a trivial modification of the disposable cover of D2. Claim 9 appears therefore to lack an inventive step in view of the combination of D2 with D4 or D5.

Claim 10 appears to be novel and inventive for the reasons exposed for claim 1.

Re Item VII

Certain defects in the international application

- 1.) Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2 and D4 is not mentioned in the description, nor are these documents identified therein.
- 2.) The independent claims are not drafted in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1, D2) being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).
- 3.) The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

CLAIMS

1. A barrier for use in relation to an eye contacting optical testing apparatus; the apparatus having a probe for contacting the eye, the barrier comprising a layer of substantially transparent material having dimensions comparable to those of the surface of the head of the probe and being removably fixable to the probe by means which do not affect the transparency of the layer and the layer being sterile at least on the surface which is to contact the eye.
2. A barrier as claimed in claim 1 wherein the barrier is provided with locating means for locating the head of the probe.
3. A barrier as claimed in claim 2 wherein the locating means comprises a coloured marker.
4. A barrier as claimed in claim 3 wherein the marker is in the form of a ring having a perimeter of substantially the same dimensions as the perimeter of the probe head.
5. A barrier as claimed in any preceding claim wherein one or more tabs are provided as a means for easy removal of the barrier.
6. A barrier as claimed in claim 5 wherein one or more of the tabs are provided with an adhesive substance for retaining the barrier onto the head of the probe.
7. A barrier as claimed in any preceding claim wherein the barrier is positioned in parallel with the optical surface of the probe head.
8. A barrier as claimed in claim 7 wherein the barrier is positioned so as to be in

communication with the entire surface of the probe head.

9. A pack of barriers for use in relation to an eye contacting optical testing apparatus comprising a first backing sheet on which are arranged a multitude of pieces of substantially transparent material each having dimensions comparable to those of the surface of the head of a probe of the optical testing apparatus, the surface of the material adjacent the first backing sheet being sterile and the alternative surface of the material being provided with a peelable adhesive, and a second backing sheet to which the multitude of pieces of substantially transparent material and the first backing sheet are adhered by means of the peelable adhesive.
10. A pack of barriers as claimed in claim 9 wherein the first backing sheet is provided with locating means for locating the head of the probe of the optical apparatus.
11. A pack of barriers as claimed in claim 10 wherein the locating means comprises a series of coloured rings having a perimeter substantially coincident with that of the head of the probe of the optical apparatus.
12. A pack of barriers as claimed in any one of claims 8 to 11 wherein the first backing sheet is provided with weakened lines to enable a portion of backing sheet surrounding one or more barriers to be removed by tearing of the backing sheet along the weakened lines.
13. A pack as claimed in claim 12 wherein the weakened lines are provided in the form of perforations.
14. A probe for an eye contacting optical testing apparatus having barrier according to any one of claims 1 to 8 removably fixed to the optical surface of its head.



15. Use of a probe as claimed in claim 14 in the testing diagnosis of eye defects or disorders.
16. Use of a barrier according to any one of claims 1 to 9 to provide a sterile surface on the probe head of an eye contacting optical testing apparatus.
17. A method of sterilising the head of a probe of an eye contacting optical testing apparatus comprising positioning a barrier according to any one of claims 1 to 9 over the head of the probe prior to contacting the cornea of the eye.
18. A barrier substantially as described herein.